

ABSTRACT

PT.XYZ is one company that is engaged in the distribution, after sales service and retailer brand vehicles xxx. The problems that occurred in that the high demand for material PT.XYZ accessories period June 2014 - January 2015 but did not offset the stock material inventory in the warehouse that cause stockout at the warehouse. Stockout problems occur because of the lack of inventory policies, including the lack of determination of safety stock to dampen fluctuations in demand.

In the present study, will be developed inventory policies for PT.XYZ including calculating the total cost of inventory and the amount of safety stock. The method used is the periodic review (R, s, S). In this method will be determined booking interval parameter (R), a combination of s (reorder point) and S (maximum level) that affect inventory control. Whereas, accessories material analyzed in this study were 350 SKU. Based on the analysis based on the pattern of demand, there is a lumpy pattern with 58% and 42% erratic patterns that have a non-uniform distribution pattern. So to help determine the demand forecast using a Monte Carlo simulation calculations. Results of this simulation calculations will then be input early demand in the methods used.

Results of the calculation of the total cost of inventory conditions proposed in PT.XYZ using periodic policy review (R, s, S) that can lower total cost of inventory up to 63% lower than the actual total cost of inventory conditions. Using a periodic review inventory policy proposals (R, s, S) is able to improve service levels, by 10% higher than the service level of actual conditions.

Key words: Material Car Accesories, stockout, backorder, inventory policy, periodic review (R,s,S), Simulasi Monte Carlo, Erratic dan Lumpy Demand, ADI-CV analysis.